REMARKS/ARGUMENTS

I. Status of the Claims and Amendments:

Claims 144, 147-148, 150-161, 163-168 and 170-192 are pending in the application. Claims 144, 168 and 177 have been amended to recite a molecular switch comprising a mutated progesterone receptor ligand binding domain which is distinct from a naturally occurring ligand binding domain by deletion of up to 54 authentic carboxyl terminal amino acids of the ligand binding domain.

II. Rejections under 35 U.S.C. §112, Written Description

Claims 144, 147, 148, 150-161, 163-168, and 170-192 had been previously rejected under 35 U.S.C. §112, first paragraph, for failing to comply with the written description requirement on the basis that the claims contain subject matter which was not described in the specification in such a way as to convey to one of skill in the art that the inventor(s), at the time the application was filed, had possession of the claimed invention. An amendment in substantive response was filed on June 16th.

In the most recent office action to which the Applicant files the present response, the Examiner stated the prior rejection was rendered moot in light of a new ground of rejection for new matter. The stated basis is that the application fails to "provide specific teaching for the claimed molecular switch having deletion of carboxyl terminal up to 54 naturally occurring amino acid."

Respective to the previously claimed "deletion of up to 54 naturally occurring carboxyl terminal amino acids of the ligand binding domain," it is unclear from the rejection whether the Examiner finds new matter in the recitation of: "up to 54"; "naturally occurring amino acids"; or perhaps of "carboxyl terminal."

While it is believed that the prior claim element is fully supported by the specification, for the avoidance of doubt, the independent claims have been recited to claim "deletion of up to 54 authentic carboxy terminal amino acids of the ligand binding domain." This description of the claimed mutation is fully supported by the specification. The specification on page 3 line 21, states that "[s]mall C-terminal alternations in amino acid sequences, including truncations, result

in altered affinity and altered function of the ligand." The specification at page 5 lines 21 – 24 states that "[i]n a preferred embodiment the mutated steroid receptor is mutated by deletion of carboxy terminal amino acids. Deletion usually comprises from one to about 120 amino acids and is most preferably less than about 60 amino acids." It is clear that the specification specifically supports a deletion of less than 60 amino acids. The present claims relate to a species of this specifically supported embodiment, to wit, a deletion of "up to" 54 amino acids, which is the subject of a working example.

The specification at page 11, lines 10 – 24 defines "mutant" as "an alteration of the primary sequence of a receptor such that it differs from the wild type or naturally occurring sequence. . . . For example, a mutant of the progesterone receptor protein will contain a carboxy terminal amino acid deletion of from about 1 to about 60 amino acids. In a preferred embodiment 42 carboxy terminal amino acids are deleted from the progesterone receptor protein."

The specification at page 27, lines 13 – 17, describes an exemplary mutant ligand binding domain according to the invention in which "the wild type receptor is truncated by 54 authentic amino acids and 12 novel amino acids are added at the C-terminus." *(Emphasis added.)* Thus, certain of the 54 carboxy terminal amino acids of the authentic or naturally occurring amino acid sequence are in effect mutated by replacement with a different sequence of amino acids.

The inventors found that carboxyl terminal alteration to the "naturally occurring" or "authentic" progesterone receptor ligand binding domain abolished progesterone binding. The inventors also surprisingly found that deletion of as much as 54 carboxyl terminal amino acids did not affect antiprogestin binding but in fact allowed antiprogestins to have agonistic effect. See page 29, lines 7– 29. Using the concrete endpoints of testing for destruction of progesterone binding while gaining an agonistic response with an antiprogestin, it would be straightforward in accordance with the high level of skill in the art to delete or replace various naturally occurring carboxyl terminal amino acids in the region up to 54 amino acids from the carboxy terminus to arrive at further mutation that achieve the desired effect. Given the high level of skill in the art, routine experimentation would be sufficient to make further useful mutants given the discovery as disclosed. To restrict the Applicants to claims limited by proffered working examples of the

specification would fall far short of a scope of patent protection commensurate with the teaching of the specification.

To the extent that any enablement rejections of earlier office actions are maintained, the arguments of the response of June 16th, 2005 are incorporated herein by reference as it is believed that the prior arguments remain relevant to the instant amended claims.

In view of the above remarks, Applicant submits that the specification has provided sufficient enablement commensurate in scope with the claims. Accordingly, Applicant respectfully requests that the rejection of claims 144, 168, 177, and claims dependent therefrom, under 35 U.S.C. §112, first paragraph, be withdrawn.

The Commissioner is authorized to charge any additional fees incurred in this application or credit any overpayment to Deposit Account No. 50-1922. Should the Examiner have any questions, please do not hesitate to call Applicants' attorney at 832-446-2421.

Respectfully submitted,

By _____

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